

Notice of Allowability

Application No.

10/766,698

Examiner

Matthew Bradley

Applicant(s)

WALLIN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 1/16/07.
2. ☒ The allowed claim(s) is/are 1,3,4,10,12 and 13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Response to Amendment

This Office Action has been issued in response to amendment filed 16 January 2007.

Claim Status

Claims 1, 3-4, 10, and 12-13 remain pending and are ready for examination.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Amend the application as follows.

With respect to the instant specification on:

- Page 17, Paragraph 0051
- Insert : - now U.S. Patent 7,165,146, - before "entitled
"MULTIPROCESSING COMPUTER ... "

Allowable Subject Matter

Claims **1, 3-4, 10, and 12-13** are allowed.

The following is an Examiner's statement of reasons for allowance: the prior art made of record teaches a prefetch method, but fails to teach the combination including the limitation of:

(Claim 1) "...determining whether the second cache is also an owner for any of the selected lines of data beyond the first line; the second cache transmitting to the first cache any of the selected lines for which the second cache is an owner; and the second cache transmitting a null-data packet to the first cache for each of a remainder of the selected lines of data for which the second cache is not an owner.";

(Claim 10) "...the second cache is configured to transmit to the first cache any of the selected lines for which it is an owner and is configured to transmit a null data packet to the first cache for each of a remainder of the selected lines for which it is not an owner.";

As dependent claims 3-4 and 12-13 depend from an allowable base claim; they are at least allowable for the same reasons as noted *supra*.

The prior art made of record, Waerdt (U.S. 2004/0039878), Koyanagi et al (U.S. 6,606,688), Hagersten et al (U.S. 5,881,303), and McMinn (U.S. 6,138,213) – to be discussed *infra* -- neither anticipates nor renders obvious the above-recited combinations.

The Examiner would further like to draw attention to McMinn (U.S. 6,138,213). McMinn, teaches a cache (item 14 of Figure 1). Broadly interpreted, McMinn teaches a first cache within the main cache (taught as Way 0 to Way N or items 30A-30N as shown in Figure 1 and taught in Column 4 lines 34-36) and a second cache within the main cache (taught as the Prefetch Way or item 32 in Figure 1 and taught in Column 4 lines 34-36). McMinn further teaches that the cache is configured to move a prefetched cache line into the first way if the microprocessor accesses the prefetched cache line

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within the prefetch way (as taught at least in Column 3 lines 40-43 as well as Column 5 lines 37-47). McMinn, however, fails to teach 'transmitting a null-data packet to the first cache for each of a remainder of the selected lines of data for which the second cache is not an owner.'

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The claims have been renumbered as following:

Original	1	3	4	10	12	13
Final	1	2	3	4	5	6

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Bradley whose telephone number is (571) 272-8575. The examiner can normally be reached on 6:30-3:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A. Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BRP/mb

MB


Brian R. Pough
Primary Examiner

2/3/07